

MICROPHONES AND ELECTRONIC COMPONENTS

Shure Brothers Incorporated 222 Hartrey Avenue Evanston, IL 60202-3696 • U.S.A.

Federal Communications Commission Office of Secretary Washington, D.C. 20554

In the matter of:

Notice of Proposed Rule Making Reallocation of TV Channels 60-69, the 746-806 MHz Band Control of the contro

ET Docket No. 97-157 FCC 97-245 FR Doc. 97-20078

COMMENTS OF:

Shure Brothers Incorporated Edgar C. Reihl, P.E. Principal Engineer 222 Hartrey Avenue Evanston, IL 60202-3696

Shure Brothers Incorporated hereby files these comments on September 10, 1997 concerning the Reallocation of TV Channels 60-69, the 746-806 MHz Band, ET Docket No. 97-157, FCC 97-245, and FR Doc. 97-20078. Shure is a manufacturer of professional wireless audio products which operate within the 746-806 MHz band. Shure holds Type Approvals granted by the Federal Communications Commission (FCC) for these products.

SUMMARY

Shure requests that Low Power Auxiliary Stations (LPAS), which currently operate in the 746-806 MHz band, be included in this proceeding. Shure further requests that

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LPAS equipment continue to be permitted to operate in this band on a secondary, non-interference basis throughout the duration of the digital TV transition period. Shure further requests that, even if LPAS operations are retired from the new exclusive public safety segments at 764-776 and 794-806 MHz at the conclusion of the digital TV transition period, LPAS equipment be permanently assigned to operate in the non public safety segments of 746-764 and 776-794 MHz on a secondary, non-interference basis, in addition to all other spectrum which is retained for television broadcasting.

DISCUSSION

Wireless audio systems operating in the television broadcasting channels operate on a secondary, non-interference basis as Low Power Auxiliary Stations (LPAS) licensed by the FCC. Considerable field experience has shown that this arrangement has worked well, and that it is practical to share TV spectrum with low power narrowband transmitters. The 746-806 MHz band has proven particularly desirable for LPAS operation due to the relatively low number of full power television stations operating in this part of the spectrum.

The FCC has proposed, in this Notice of Proposed Rule Making (NPRM), to reallocate the 746-806 MHz band to other services. In particular, the FCC has proposed to allocate 24 MHz for public safety in two bands, from 764-776 MHz and 794-806 MHz. In addition, it has proposed to allocate the remaining 36 MHz to the fixed, mobile, and broadcasting services, and to offer licenses on a competitive bid basis.

The FCC has stated in its proceedings that it relied on the recommendations of the Public Safety Wireless Advisory Committee (PSWAC) in its decision to allocate the 764-776 and 794-806 MHz bands for the exclusive use of public safety services. Shure has no basis on which to debate this decision. However, all Shure UHF wireless audio systems sold to date operate in the 746-806 MHz band, as do systems from other manufacturers. Thus, users could find their operations partially, or in some cases, entirely displaced by this Rule Making.

The FCC has stated that it proposes to "protect full-power TV stations in the band until the transition to digital television (DTV) is complete, and to retain the secondary status in the band of Low Power TV (LPTV) and TV translator stations". Shure notes the apparent omission of any mention of Low Power Auxiliary Stations (LPAS) from this proceeding. Since LPAS equipment is an integral part of the news gathering and programming operations of most, if not all full and LPTV stations (including those full and LPTV stations operating in other parts of the TV spectrum), we propose that the FCC should consider the impact of this proceeding upon such stations.

In particular, Shure proposes that LPAS operations should be included in this proceeding and that they should be afforded the same secondary non-interference status that they presently have during the transition period to digital television, in the full 746-806 MHz band. This should pose a minimal interference threat to public safety operations in those portions of the band being newly allocated to them, particularly in comparison to the other services (e.g., full power and low power TV stations) which the

FCC proposes to permit to continue to operate on a shared basis during the digital TV transition period. It will also afford time for existing LPAS users to modify their equipment for operation in another part of the band which is not used by public safety. Some LPAS users may be forced to retire their equipment if it cannot be modified, in which case, the provision of a transition period would allow them to recover a portion of their investment and prevent disruption of LPAS operation.

Upon the conclusion of the digital TV transition period, Shure proposes that, even if LPAS operations are retired from the new exclusive public safety segments at 764-776 and 794-806 MHz, LPAS operations at least be permitted to continue permanently on a secondary non-interference basis in the remaining 36 MHz of spectrum not exclusively assigned to public safety, e.g. 746-764 and 776-794 MHz. It is in this portion of the spectrum that the FCC has proposed to continue to allow TV broadcasting after the conclusion of the transition period.

In the subject Proposal, the FCC has highlighted the need for spectrum space for low power television (LPTV) and translator stations, and has solicited comments from the public on the most suitable part of the spectrum for these stations to operate. It is the opinion of Shure that Low Power Auxiliary Stations (LPAS) should be included in this inquiry. Shure believes that LPAS can coexist well with LPTV and translator operations, and should be permitted to operate in the same bands as these services. In addition, Shure proposes that in order to provide the necessary degree of flexibility to accommodate existing and future LPAS, LPTV and translator stations, the FCC should

continue to permit these services to operate on a secondary basis in the non public safety segments of the 746-806 MHz band, e.g. 746-764 and 776-794 MHz, as well as all other spectrum which will be retained for television broadcasting after the digital TV transition period has ended.

The FCC has previously decided to relax many of the UHF "taboos" that limited the number of TV stations which could operate. These restrictions were based on technical limitations at the time the UHF TV service was initiated. By relaxing these restrictions, the FCC has made it possible for all currently licensed TV stations to operate with both analog and digital transmitting facilities during a transition period. At the end of this period, when stations are required to relinquish one of their channels, these channels will become available for reassignment. Having demonstrated the feasibility of operating an increased number of full power facilities in this spectrum, there is every reason to believe that additional new full power TV stations may be licensed for operation on the channels which have been returned. Thus, the overall density of TV spectrum use is likely to continue at or near the level which will be established at the peak of the digital TV transition period.

In urban areas, this will mean that it will continue to be difficult to find usable spectrum for LPAS and LPTV operations, even after the digital TV transition period has ended. (The same would be true of translator stations, except that these typically operate in sparsely populated or underserved areas). Therefore, retaining the non public safety band segments from 746-764 and 776-794 MHz for LPAS, LPTV, and translator use on

a secondary basis would provide increased flexibility for the operation of these stations.

The FCC has postulated this use (with the exception of LPAS facilities) in the instant

proceeding, and Shure concurs with this proposal.

CONCLUSION

For the reasons stated above, Shure requests that Low Power Auxiliary Stations (LPAS), which currently operate in the 746-806 MHz band, be included in this proceeding. Shure further requests that LPAS equipment continue to be permitted to operate in this band on a secondary, non-interference basis throughout the duration of the digital TV transition period. Shure further requests that, even if LPAS operations are retired from the new exclusive public safety segments at 764-776 and 794-806 MHz at the conclusion of the digital TV transition period, LPAS equipment be permanently assigned to operate in the non public safety segments of 746-764 and 776-794 MHz on a secondary, non-interference basis, in addition to all other spectrum which is retained for television broadcasting.

Respectfully submitted,

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